

State Broadband Mapping Overview

Objectives

- To introduce the State Broadband Initiative: grant, project, data, mapping tool, and resources
- To communicate how we see that you and others across the State can help us improve the map
- To hear your feedback and perspectives in order to improve the value of the map for New Jersey

Agenda

- Grant and Project Background
- Overview of State Broadband Map Data
- Tour of the State Broadband Mapping Tool
 - Navigation Examples
- Connecting with ConnectingNJ
- Q&A

Grant Background



Grant Background

- ▶ NTIA's State Broadband Initiative (SBI) combines the joint purposes of the American Recovery and Reinvestment Act (ARRA) and the Broadband Data Improvement Act, which envisioned a comprehensive program, led by state entities or non-profit organizations, to facilitate the integration of broadband and information technology into state and local economies in order to improve our local and national economic competitive advantage.
- ▶ New Jersey Office of Information Technology (NJ-OIT) was awarded federal funds to support five years of state-led efforts to collect data semiannually on the availability, speed, and location of broadband services across the state.
- ▶ The first phase of the New Jersey SBI program, ConnectingNJ, includes a data collection and mapping effort to build a state broadband map showing availability and speed of broadband access in the State to gain a better understanding of broadband utilization versus capacity.
- ▶ OIT has been working with a selected vendor and broadband service providers and community anchor institutions (CAI's), including education institutions, libraries, healthcare providers, government and other non-government organizations to collect, validate, verify data on broadband services available throughout the state.

Overview of State Broadband Map Data

New Jersey State Broadband Map Data



- ▶ To begin realizing the benefits of the initial phase of data collection, NJ OIT created a Broadband Map with data from approximately 30 Broadband providers and 15,000 community anchor institutions, including educational institutions, libraries, healthcare, state and local government within the State.
- ▶ The purpose of the Broadband Map is to support efforts to expand broadband access and provide businesses and consumers with the relevant information they need to make decisions related to their high speed internet options.
- ▶ Below is the current snapshot of CAI data collected to date:

CAI Data Summary (as of 9/25/12)	Total # of Locations Identified	Total # of records with broadband data
CAI Category		
School K-12	3762	2465
Libraries	460	43
Medical/Healthcare	8604	5
Public Safety	337	76
University	159	34
Other – State and Local Government	1694	1694
Other – Non Government	8	8

New Jersey State Broadband Map Data



- ▶ The data being gathered provides information on:
 - Where broadband service is available
 - The technology used to provide the service
 - Names of providers and the areas they service
 - Maximum advertised speeds of the service they provide
 - Locations and speeds of community anchor institutions.
- ▶ The State of New Jersey's Broadband Map is refreshed and updated every six months and can be found at <http://connectingnj.state.nj.us>
- ▶ With a comprehensive and continually updated map, the State can continue building the value of the New Jersey Broadband Map, so it can be used as an effective tool for state policy makers, businesses and citizens to:
 - Identify pockets of unmet demand or need
 - Help policy makers identify where the unmet needs are so they can determine how best to fulfill them
 - Use the map as a tool to market NJ and support decisions for businesses looking to relocate
 - Identify where existing technology infrastructures can be leveraged
 - Help providers and customers find each other

Tour of State Broadband Mapping Tool

Home Page

New Jersey SBI Data Mapping Tool

http://njgin.state.nj.us/oit/gis/OIT_BroadbandMapping/



CONNECTING NJ

State of New Jersey ConnectingNJ Broadband USA

Home Legend/Layer List Find a Location Map FAQ & Help

Getting Started

To begin realizing the benefits of the initial phase of data collection, NJ OIT created a Broadband Map with data from 30 Broadband providers and approximately 15,000 community anchor institutions, including educational institutions, libraries, healthcare, state and local government within the State.

The purpose of the Broadband Map is to support efforts to expand broadband access and provide businesses and consumers with the relevant information they need to make decisions related to their high speed internet options.

The State of New Jersey's Broadband Map was developed with the funding from the State Broadband Initiative and is refreshed and updated every six months.

For more details on the Broadband Mapping Program or guidance in using the application, please click the FAQ & Help tab.

Last Updated

The Broadband information in this page was last updated October, 2012

Connecting NJ - Broadband Mapping

CONNECTING NJ

Broadband is a growing service within the State of New Jersey, yet despite that fact, the State has never undertaken an effort to map broadband availability utilization within the State. New Jersey was awarded funding by the National Telecommunications and Information Administration's (NTIA) State Broadband Data and Development Grant Program (Broadband Mapping Program), the State has the means to capture where broadband is available and most importantly determine the utilization (current demand) capacity and future demand for broadband statewide.

[Continue](#)

Links

State of New Jersey

ConnectingNJ

Broadband USA

The diagram illustrates the following links:

- State of New Jersey** (http://www.state.nj.us/) links to **ConnectingNJ** and **Broadband USA**.
- ConnectingNJ** (http://connectingnj.state.nj.us/) links to **Broadband USA**.

State of New Jersey Website: THE OFFICIAL WEB SITE FOR THE STATE OF NEW JERSEY. Navigation menu includes Home, About NJ, Business, Community & Wellness, Education, Employment, Government, NJ Green, Public Safety & Security, Things to do in NJ, and Transportation & Motor Vehicles. A featured banner for the Hurricane Sandy Information Center is visible.

ConnectingNJ Website: BROADBAND IN NEW JERSEY. Navigation menu includes Home, About, Broadband Benefits, Test Your Speed, Events, Broadband Map, Resources, Get Involved, and Contact Us. It features a New Jersey Broadband Map and a section titled "Is Your Small Business Using the Internet".

Broadband USA Website: BROADBANDUSA CONNECTING AMERICA'S COMMUNITIES. Navigation menu includes ABOUT, GRANTS AWARDED, PROGRAM INFORMATION, BRIEFING ROOM, GRANTS MANAGEMENT, and CONTACT US. It features a search bar and a section titled "Action Planning Authority".

<http://www.state.nj.us/>

<http://connectingnj.state.nj.us/>

<http://www2.ntia.doc.gov/>

Tabs



Home – Returns user to the main page “Getting Started” and “Last Updated” pane

Legend / Layer List – Brings user to the “Layer List”, “Community Anchor Institutions” and “Legend” keys denoting the data to view

Find a Location – Takes user to a specific address, county or municipality if known prior to search

Map – Displays the Broadband Map details selected in the “Legend / Layer List”

FAQ & Help – Navigation assistance and information how to get the most of the tool for your personal or business needs

Getting Started

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
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Legend/Layer List

Layer List

- ☒ Provider Count 
- ☐ Maximum Download Speed 
- ☐ Maximum Upload Speed 
- ☐ Cable 
- ☐ Copper 
- ☐ DXL 
- ☐ Fiber 
- ☐ Terrestrial Fixed Wireless 
- ☐ Terrestrial Mobile Wireless 
- ☐ Satellite 






Community Anchor Institutions

- ☐ Schools - K through 12
- ☐ Libraries
- ☐ Medical/Healthcare
- ☐ University, College, or Post-Secondary Institution

Legend

Broadband Information

Provider Count

-  1 Provider
-  2 Providers
-  3 Providers
-  4 Providers
-  5 or More Providers

Find a Location

Find by Address

Address of Interest:

Find Address

Choose County

County:

Municipality:

Map



FAQ & Help

Getting Results

There are many ways to get information regarding the wired broadband coverage for a specific area in the application. Users can:

- Enter an address
- Choose a County and Municipality from drop down lists
- Click on the map

Depending on the method used to select a location, different levels of information are presented. The '**Find a Location**' tab returns specific information about service providers for a location that is defined by either clicking on the map or entering an address.

Navigating

Double-click on the map to zoom in, and drag to pan. Hold down the shift key and drag to zoom to a particular area.

Map Uses

With a comprehensive and continually updated map, the State can continue building the value of the New Jersey Broadband Map, so it can be used as an effective tool for state policy makers, businesses and citizens to:

- Identify pockets of unmet demand or need
- Help policy makers identify where the unmet needs are so they can determine how best to fulfill them
- Use the map as a tool to market NJ and support decisions for businesses looking to relocate
- Identify where existing technology infrastructures can be leveraged
- Help providers and customers find each other

To-date, most service providers have been responsive. However, collecting data on community anchor institutions has been a challenge due to the lack of existing broadband data sources and a lack of participation to provide the data. As additional information and data is provided, the New Jersey Broadband map will become more dynamic and interactive.

How Other States and Groups have Gained Value from the Broadband Map

Utah, a mid-sized company in the health care field was losing time and money due to frequent broadband outages at a rural office. The company considered moving these jobs to their headquarters in an urban location. However the company was able to use the National Broadband Map to identify other broadband providers in this rural county – and retain hundreds of jobs in this rural area.

Kansas, The Kansas Department of Commerce and a customer service company used the map to identify communities with the broadband necessary to support home-based workers. As a result, the customer service company hired about 200 workers in the state, providing much-needed jobs in small towns that may have otherwise been overlooked for this work.

South Dakota, An online training company used the map to identify towns in South Dakota where they can locate new offices, which will support more than 100 professional jobs in these rural locations.

Academic Research, The map has supported academic research at more than 1,000 colleges and universities and been used by more than 500 city and county governments.

Navigation Examples

Provider Count

How many providers service my area?

Home **Legend/Layer List** Find a Location Map FAQ & Help

Layer List

- ☒ Provider Count
- ☐ Maximum Download Speed
- ☐ Maximum Upload Speed
- ☐ Cable
- ☐ Copper
- ☐ DXL
- ☐ Fiber
- ☐ Terrestrial Fixed Wireless
- ☐ Terrestrial Mobile Wireless
- ☐ Satellite

Community Anchor Institutions

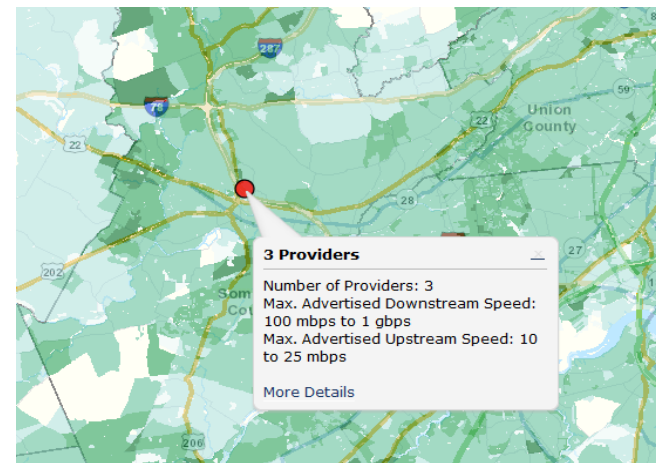
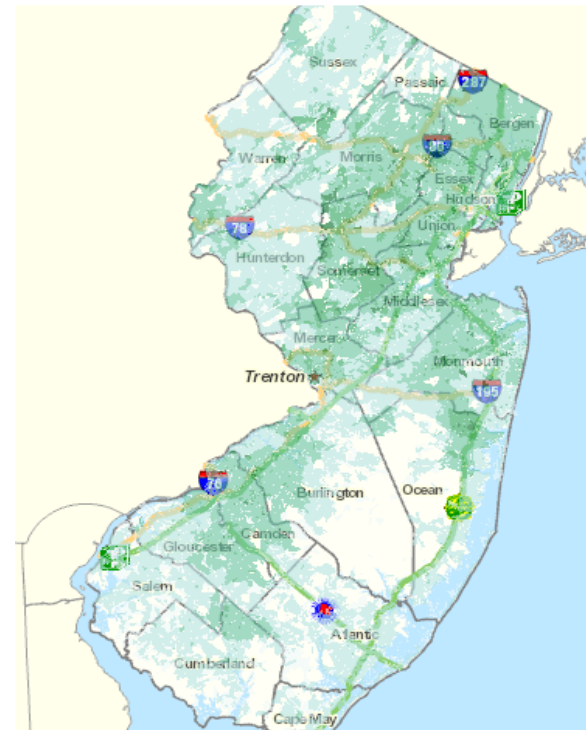
- ☐ Schools - K through 12
- ☐ Libraries
- ☐ Medical/Healthcare
- ☐ University, College, or Post-Secondary Institution

Legend

Broadband Information

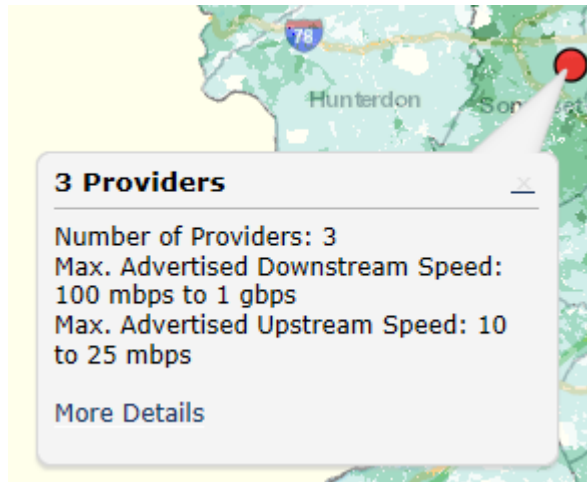
Provider Count

- 1 Provider
- 2 Providers
- 3 Providers
- 4 Providers
- 5 or More Providers



Provider Count – “More Details”

What are statistics on
the particular area I’m
analyzing?

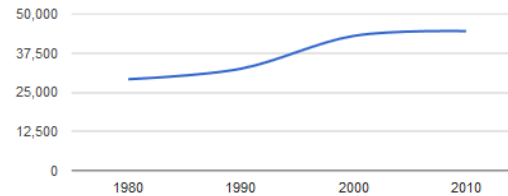


Broadband Coverage Information

Municipal Information

Bridgewater Township, Somerset County
 Square Miles: 32.34

Population (1980 to 2010)



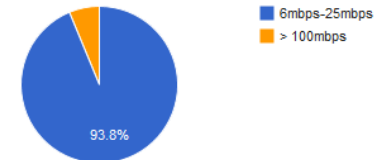
Provider Coverage

Area in square miles



Upload Speed Coverage

Area in square miles



Wired Provider Options

Provider	Wired Broadband Technology
CABLEVISION	Cable Modem - DOCSIS 3.0
Covad Communications Company	Asymmetric xDSL
Covad Communications Company	Symmetric xDSL
Covad Communications Company	Other Copper Wireline
Verizon	Asymmetric xDSL

Provider Count – Community Anchor Institutions

Where are the schools, libraries, and medical facilities in relation to my point of interest?

Community Anchor Institutions

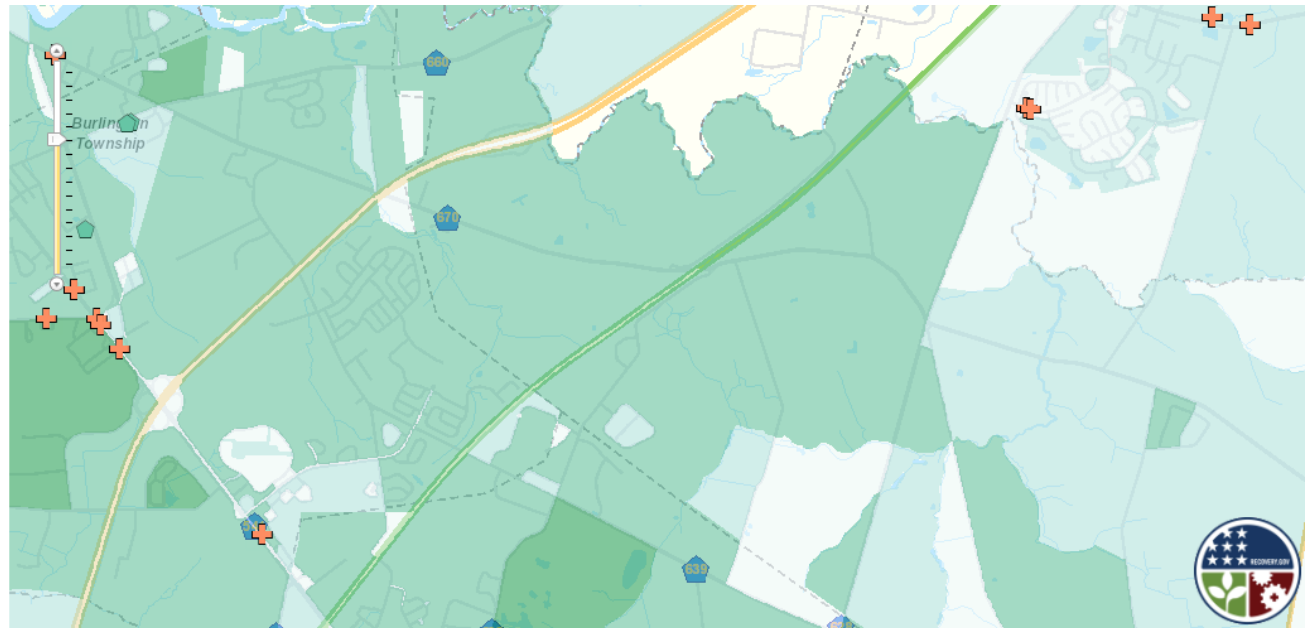
- ☒ Schools - K through 12
- ☒ Libraries
- ☒ Medical/Healthcare
- ☒ University, College, or Post-Secondary Institution

Legend

Community Anchor Institutions

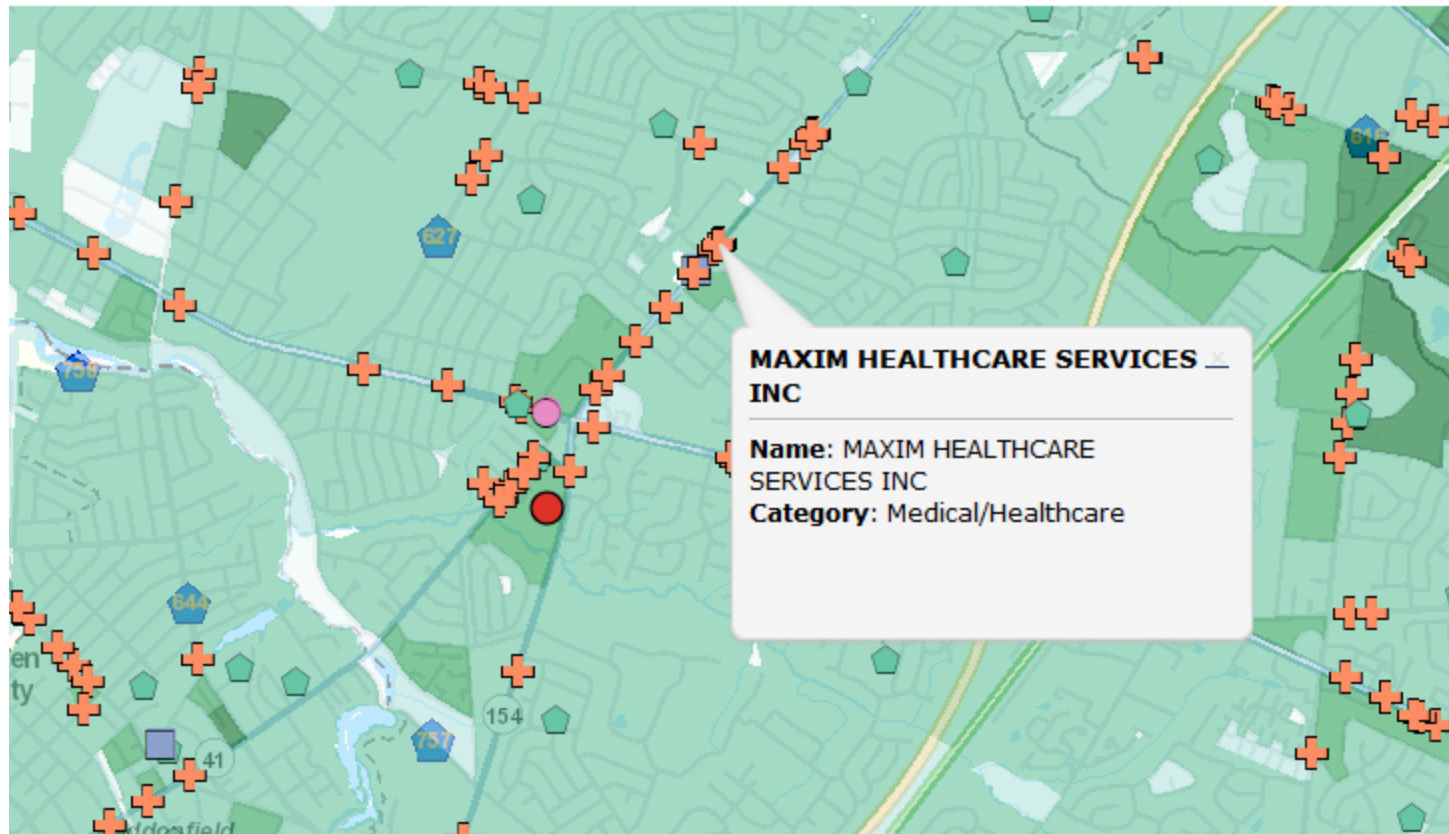
-  School - K through 12
-  Library
-  Medical/healthcare
-  University, college, other post-secondary

- A user must zoom 5 Levels deep via the zoom bar to have this option available to select CAIs menu
- Current CAI categories available are School (K–12), Libraries, Medical/Healthcare, and University, College, or Post–Secondary Institution (each marked separate by symbol)



Provider Count – Community Anchor Institutions (cont.)

Click on a specific CAI and retrieve name of institution and it's category (Libraries, Schools, etc)



Find a Location

I want to focus on a specific address or county/township, can I jump directly to it?

Find by Address

Address of Interest:

Find Address

Choose County

County: ATLANTIC

Municipality:



Home Legend/Layer List Find a Location

Find by Address

Address of Interest:

Find Address

Choose County

County: ATLANTIC

Municipality: Atlantic City





Connect with ConnectingNJ

connectingnj.state.nj.us



Q&A



Thank you!